



Cascadia Subduction Zone (CSZ)
Catastrophic Earthquake and Tsunami Functional Exercise 2016

Lincoln County After Action Report - *FINAL*

Day 1, 6.2 Foreshock, June 7, 0800 – 1200

and

Day 4, 9.0 Mainshock, June 10, 1300 – 1700

Presented to Lincoln County Board of Commissioners, March 8, 2017



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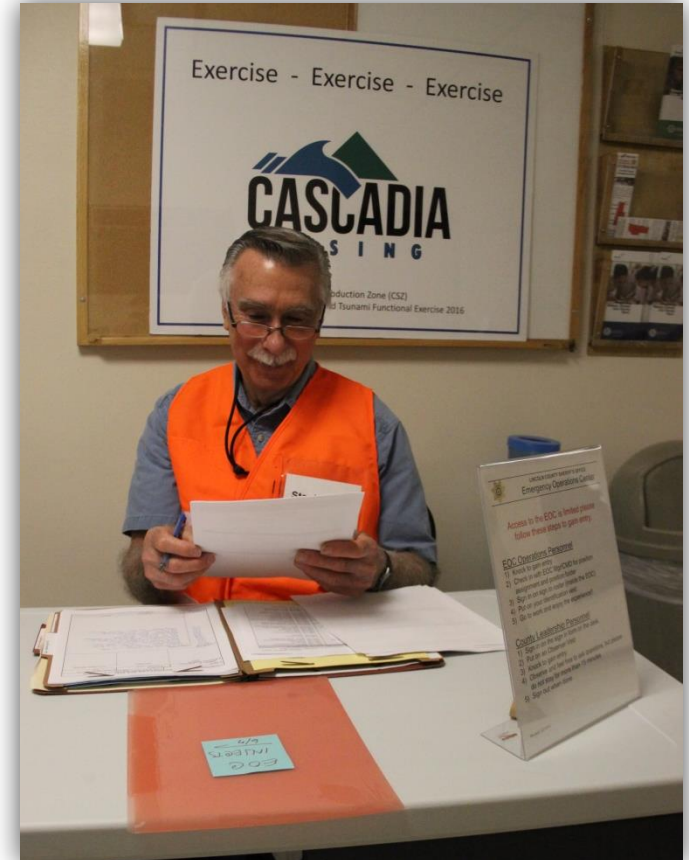
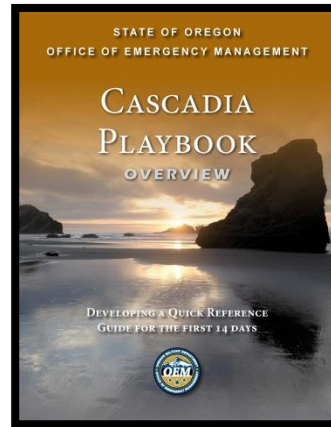
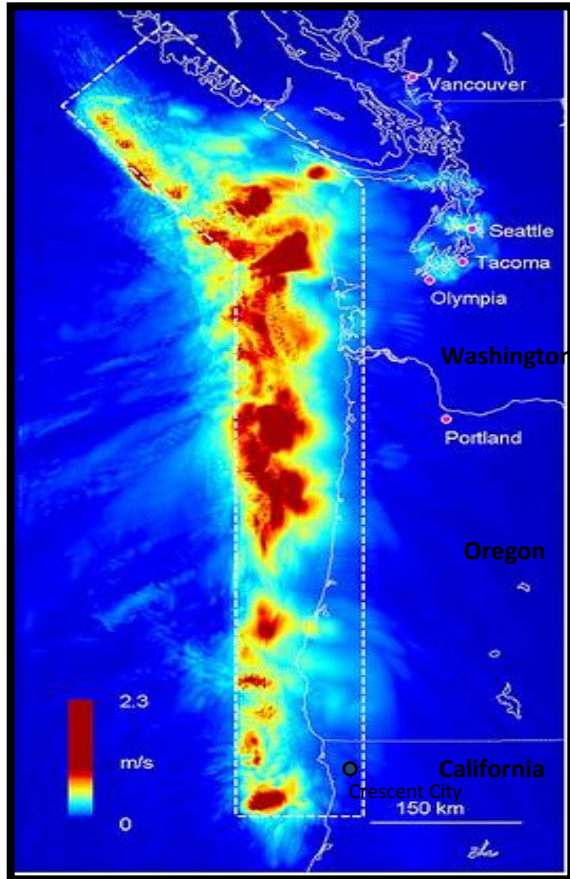
Lincoln County

After Action Report Overview

- How did we get here?
- Who participated?
- What lead-up activities did we accomplish?
- What did we learn?
- What's next? *Strengthen our Community Resiliency!*



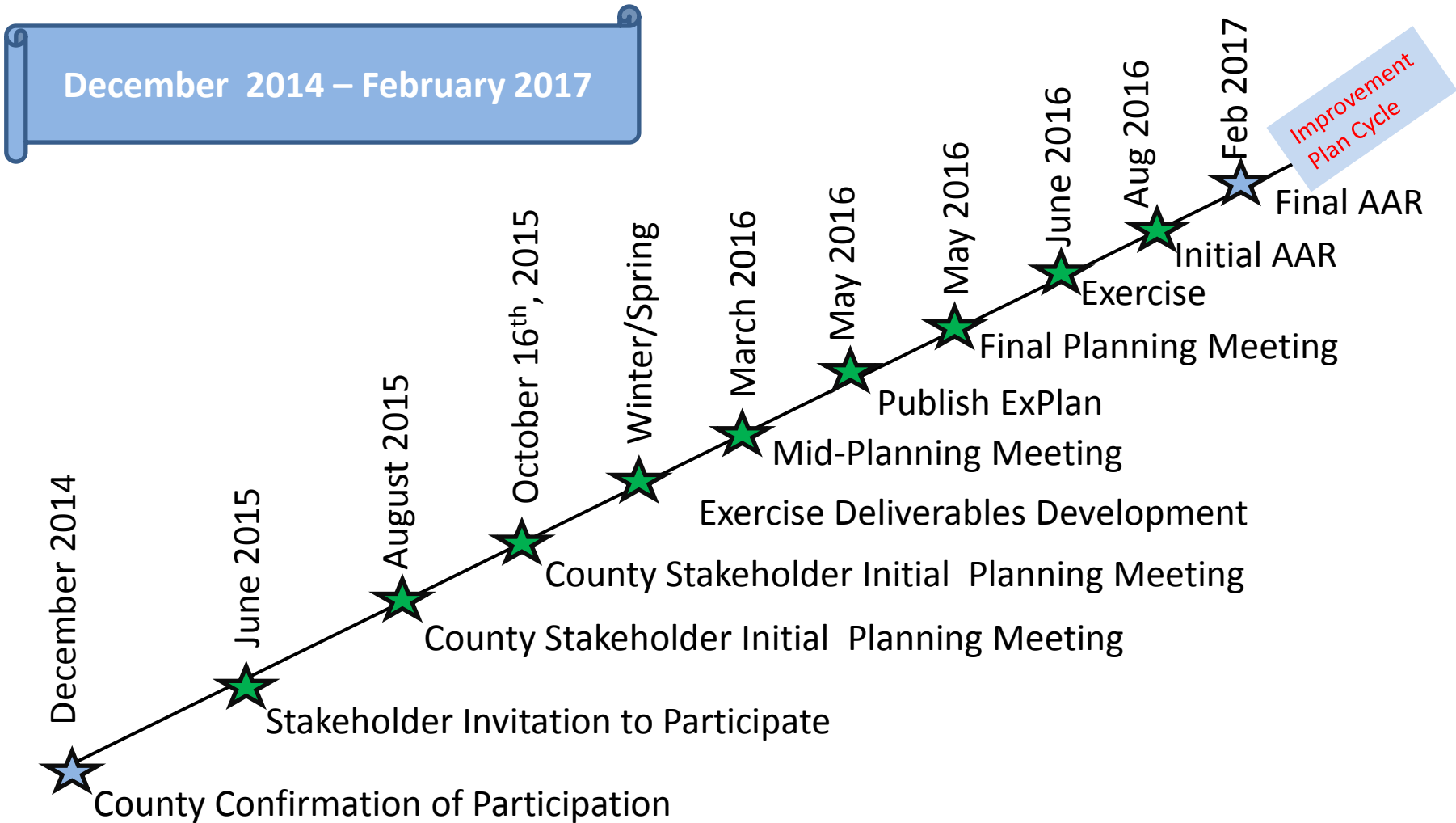
How did we get here?



After Action Report – Final January 2017
Lincoln County, Oregon



Local Planning Timeline



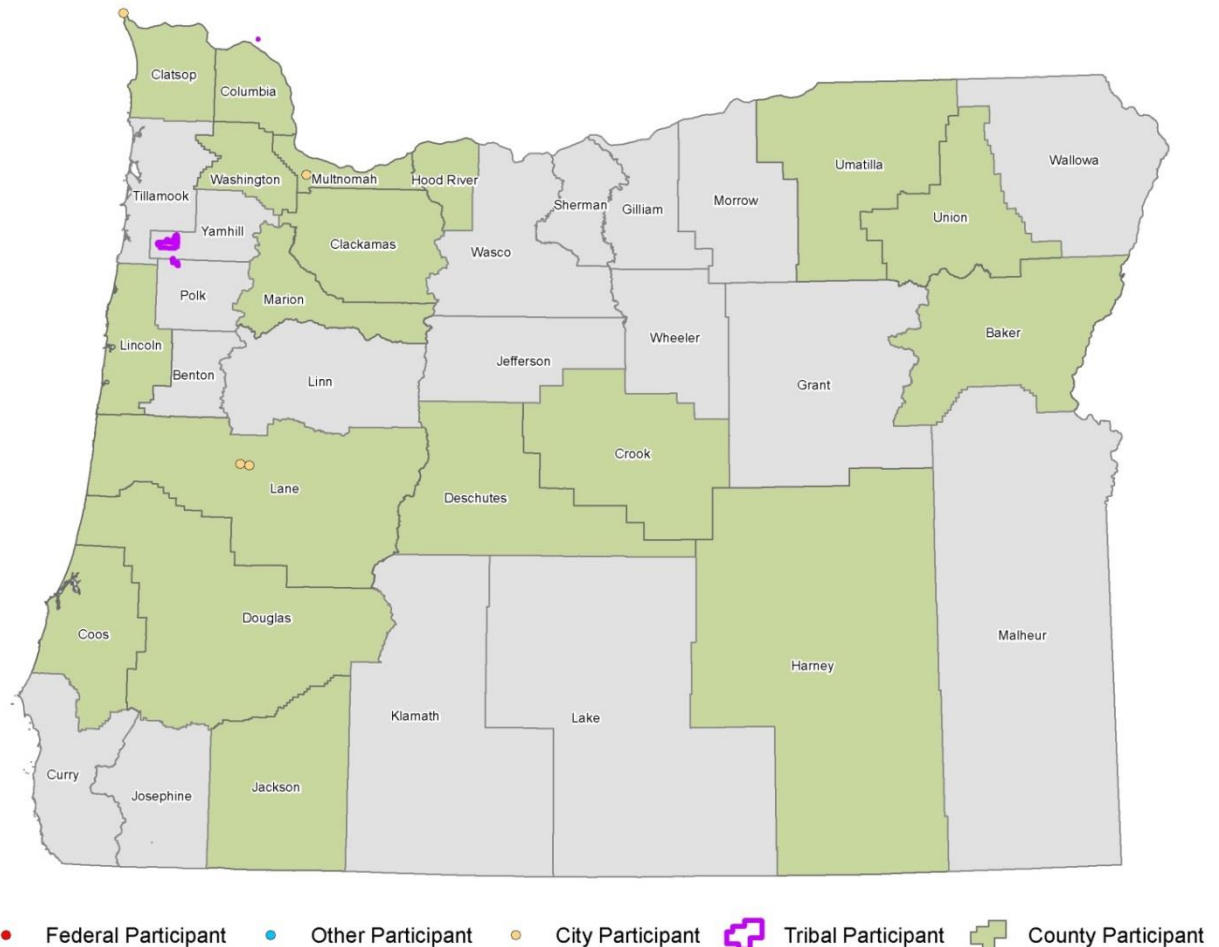
Who Participated?

- Partnerships, Before, During and After
 - City, County, Tribe, State, Federal
 - Non-Governmental Organizations
 - Volunteer Organizations
 - Private Sector
 - Special Districts
 - Military & National Guard
 - Community



State/Regional Participants

- OR Coastal, I-5 Corridor, and East-of-the-Cascades cities, counties, and tribes
- OR OEM, state agency Emergency Support Functions
- FEMA Region 10 and regional federal interagency partners
- FEMA National Response Coordination Center (NRCC)
- Department of Defense (NORTHCOM, NRNW, etc.) i.e. Ardent Sentry
- Nongovernmental Organizations (VOAD)
- Select private sector partners
- Private and public critical infrastructure lifeline providers
- Public FSE components (e.g. Tsunami Evacuation Drills)



Participants - Lincoln County

- Cities of Lincoln County
- City of Hillsboro – EM
- Confederated Tribes of Siletz Indians
- County of Lincoln:
 - Sheriff’s Office – Jail, EM, Patrol, Animal Shelter, SAR, Posse, ACS, EM Volunteers
 - Public Health
 - Planning
 - Facilities
 - BOC and PIO
 - Roads/Public Works
 - Solid Waste Advisory Council
 - District Attorneys Office – Volunteer
- County of Tillamook – EM
- Educ. - Hatfield Marine Science Center
- Educ. – Lincoln County School District
- Fed - NOAA
- Fed - USCG Station Yaquina Bay
- Fed - Representative Gomburg
- Fire – Fire Districts/Depts. of Lincoln County
- State - Oregon State Parks
- State – Oregon State Police
- VOAD - American Red Cross
- WVCC Dispatch



Participants – County EOC Fixed & Field Ops

June 7 Exercise:

6.2 Foreshock – Fixed EOC

- 27 Participants (County EOC)
- 108+ participation hours (County EOC)
- **All 7 cities and tribal partners participated**

June 10 Exercise:

9.0 Mainshock – Field Ops

- 30 Participants (County EOC)
- 120+ participant hours (County EOC)
- 80 attendees checked in City/County Field Ops
- Set-up/Demob hours – too many to count!!!
- **All 7 cities and tribal partners participated**



What lead-up activities did we accomplish?

- Community Cascadia Presentations
- Training Activities
- Exercise Activities

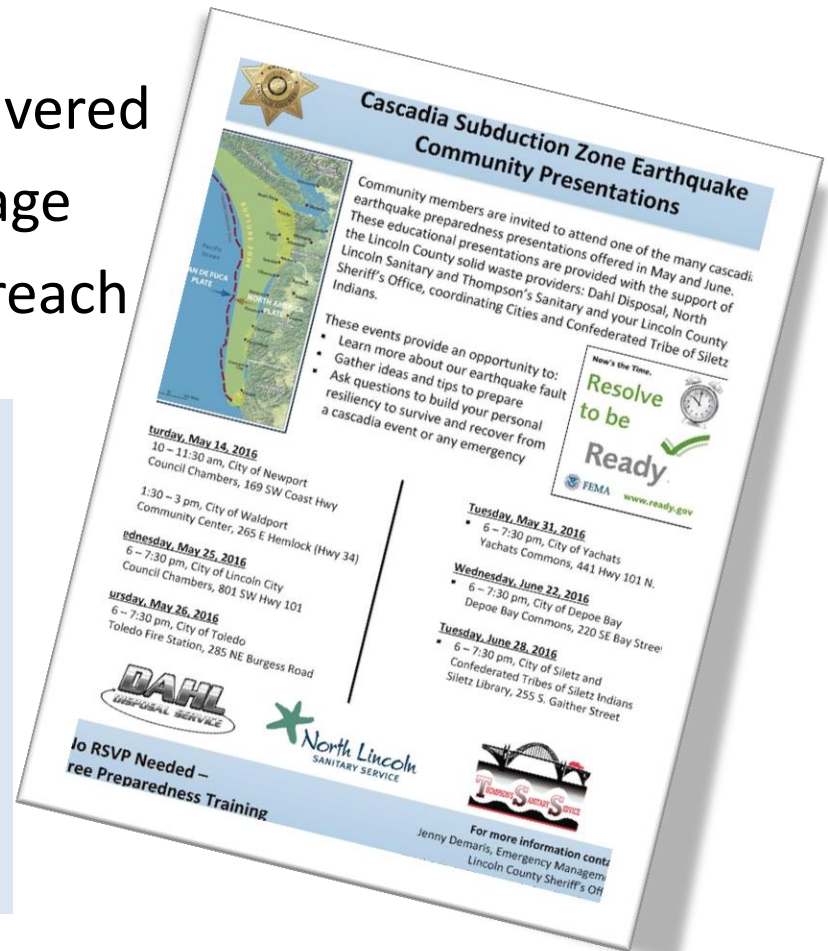


Lead-up: Community Presentations

- July 2015 – June 2016
- 33 Community presentations delivered
- 1,026 attendees heard our message
- 240+ staff hours allocated to outreach

Presentations provided for:

- USCG, ONG service members and their families
- Oregon Coast Community College
- Neighborhood associations/groups
- Chambers of Commerce
- Solid Waste Advisory Council
- Georgia Pacific
- All cities and Confederated Tribes of Siletz Indians
- Pacific West Ambulance
- Local Oregon State Parks and ODOT personnel
- Lincoln County employees



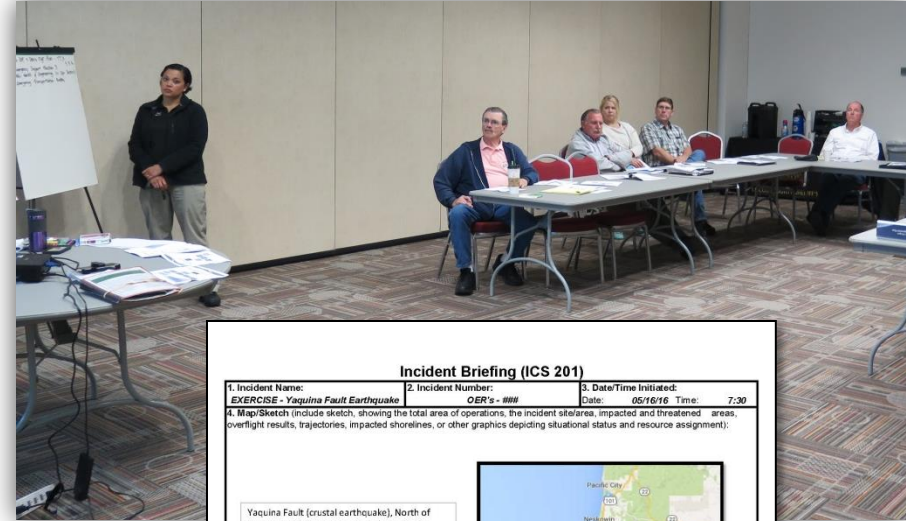
Lead-up: Training Activities

- Public Health, ICS/EOC Refresher, w/ESF 8 & 12 Review
- EOC/County Personnel ICS/EOC Refresher
- Stakeholder EOC Resource Ordering and Situational Assessment
- Crisis Communication for Non-PIO
- MGT-340 Crisis Leadership & Decision Making
- ICS 300, 400 and Forms
- County Leadership ICS/EOC and COOP Training
- Shelter/Tent Deployment



Lead-up: Exercise Activities

- Great Oregon ShakeOut
- EOC, Set-up
- EOC, Agency Check In & Sit Stat
- Debris Mgmt., Earthquake
- EOC, Resource Ordering & Coordination
- Auxiliary Communications
 - 1) 24 hour staffed exercise
 - 1) 8 hour staffed exercise



Incident Briefing (ICS 201)		
1. Incident Name: EXERCISE - Yaquina Fault Earthquake	2. Incident Number: OCER's - ##	3. Date/Time Initiated: Date: 05/16/16 Time: 7:30
4. Map/Sketch (include sketch, showing the total area of operations, the incident site/area, impacted and threatened areas, overflight results, trajectories, impacted shorelines, or other graphics depicting situational status and resource assignment):		
<p>Yaquina Fault (crustal earthquake), North of Newport, M4.0, 20 seconds shaking, Pacific Tsunami Warning Center confirms no tsunami threat.</p> <p>Yaquina Fault is 8 miles long and is considered a crustal fault line.</p>		
5. Situation Summary (for briefings or transfer of command): 0533 crustal earthquake felt, epi center just north of Newport on the Yaquina fault (8 miles long), felt throughout areas in Lincoln County.		
National Tsunami Warning Center confirmed within 3 minutes there is no threat for tsunami. Public safety attention focused on notify residents through notification systems and communication at tsunami assembly areas and neighborhoods.		
Public Safety Leadership conference call held and all major stakeholders have been accounted for and focused on uniformed objectives as noted below.		
Primary focus on life safety of evacuee's, possible trapped persons in damaged buildings, responder safety, public messaging. Next focus on detailed damage assessment, evaluation of additional resource needs.		
6. Prepared by: J.Dennis	Position Title: EOC Mgr.	Signature: _____
ICS 201, Page 3		Date/Time: 05/16/16, 0730



What did we learn?

State of Oregon



Cascadia Rising 2016 Exercise
Catastrophic Earthquake & Tsunami Scenario

June 7 – 10, 2016

Statewide After-Action Final Report

This After-Action Report (AAR) provides an overview of Oregon's statewide participation in the Cascadia Rising 2016 Exercise. It describes activities that occurred during the exercise, identifies key assessment findings, and provides recommendations for the enhancement of local, tribal and state-level emergency management programs with a focus on coordination and mutual support.

Developed by Oregon Office of Emergency Management
February 2017

After Action Report

Lincoln County Sheriff's Office

Cascadia Rising

June 7 – 10, 2016



****For Official Use Only****

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Issue Date: 01/06/17



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Lincoln County



After Action Report (AAR)

- ✓• Completion and analysis of:
 - Exercise coordination evaluation – survey
 - Exercise participant survey (city/tribal/county)
 - State participant survey
- ✓• Community Stakeholder AAR meeting – 08/02/16
- ✓• Review and comparison of State AAR, draft Nov & Jan 2016, final March 2017
- ✓• Completion of AAR - initial draft and Final Report 01/06/17
 - Presentation of AAR to:
 - ✓ – Policy Group – 03/08/17
 - ✓ – Public – 03/20/17
 - ✓ – Community Stakeholders – 03/20/17
- ✓• Implementation of strategic and tactical 0-36 month plan for improvement



Initial Focus Areas: Countywide

Considerations

- Fuel conservation and distribution plan
- More user friendly EOC/Incident Mgmt System
- Long Term Recovery Plan
- Increase of additional redundant communications at City/Tribal/County EOCs – Marine and CB radio systems
- Reassessment of Points of Distribution (POD) locations
- Assignment of Fuel Points of Distribution (FPOD)
- Consideration of adoption of Emergency Support Function positions

Training and Exercises

- Emergency Support Function (ESF) position training
- ATC 20 - Post Earthquake Safety Evaluation of Buildings
- ATC 45 - Safety Evaluation of Buildings after Windstorms and Floods
- ICS 300 & 400

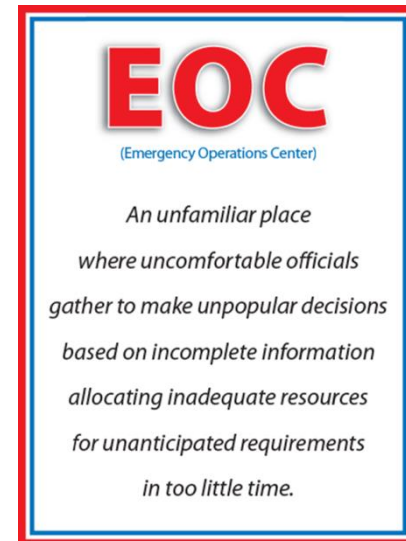


Initial Focus Areas: County EOC

Considerations

- Ability to increase capacity of EOC facility to include Joint Information Center (JIC) space
- Additional technology features, network ports, cell service booster, laptops, projector screens
- Conversion of Emergency Support Function positions in job action guide folders

- Continuation of recruitment of EOC staff and support staff
- Consideration of additional mobile tent capacity for EOC



Moving forward following Cascadia Rising

- Develop strategic recommendations
- Develop realistic short and long term tactical improvements
- Engage the public and non-governmental partners in active preparedness dialogue to obtain higher level of individual, community and governmental preparedness/resiliency
- Top 4 planning efforts for Lincoln County



Strategic Findings & Recommendations

Finding No.	Description
#1 STRATEGIC OBSERVATION	Current emergency planning is not adequate or comprehensive enough to effectively address catastrophic disasters and their impact on the whole community within Lincoln County.
#1 STRATEGIC RECOMMENDATION	All levels of government should conduct more robust and detailed catastrophic planning, build and maintain sustainable readiness capabilities, collaborate with all aspects of the community, and regularly exercise response plans and operational assumptions.
#2 STRATEGIC OBSERVATION	The state may be at significant risk following a catastrophic CSZ earthquake because of the scope and scale of impact to the population throughout the region, widespread and significant damage to critical infrastructure, loss of local/tribal/state response capability, and substantive impact to and disruption of local/tribal/state government continuity and operational integrity.
#2 STRATEGIC RECOMMENDATION	Local governments should continue to focus facilitation of region-wide preparedness and response planning and formulate appropriate mechanisms to support local emergency management activities and efforts.



Strategic Findings & Recommendations

Finding No.	Description
#3 STRATEGIC OBSERVATION	Government, at all levels, is ill-equipped to implement effective Continuity of Operations (COOP) and Continuity of Government (COG) operations based upon the level of impact identified during the exercise. The lack of government survivability poses a direct impact to both response operations and post-impact recovery efforts.
#3 STRATEGIC RECOMMENDATION	The first requirement of government following a catastrophic event is to survive and sustain essential operations. In order to accomplish that mission, it is vital that local, tribal and state government agencies develop realistic and effective plans and capabilities relating to both COG and COOP needs involving catastrophic events.
#4 STRATEGIC OBSERVATION	The exercise identified that the current approach to catastrophic event preparedness and response planning at various levels of government within the state are in need of increased dedication of local city, tribal and county government.
#4 STRATEGIC RECOMMENDATION	Jurisdictions and organizations should make catastrophic planning for emergency preparedness a critical priority within Oregon. This includes actions to be taken by individuals/families, private sector, community organizations, and governments that increase the opportunity for survivability.



Strategic Findings & Recommendations

Finding No.	Description
#5 STRATEGIC OBSERVATION	<p>The exercise showed that government’s ability to effectively communicate critical warnings, direction and preparedness information to the public was greatly reduced because of impacts to standard communication systems and networks. This impact to communication infrastructure presents a significant obstacle to government attempts at timely dissemination of essential disaster information during a catastrophic event. Though challenging at best, dependency on simple communication technology and operators will become critical, i.e., utilization of marine frequency, citizen band (CB) radio, family radio service (FRS) radio, amateur radio and line of site systems, during a Cascadia response.</p>
#5 STRATEGIC RECOMMENDATION	<p>Short Term – There should be strengthening or building redundancy at optimal locations in each city, tribal area and key unincorporated areas.</p> <p>Long Term - Greater emphasis should be directed to the hardening of vulnerable local and state communications infrastructure, development of redundant communication pathways and enhanced coordination between all sectors of government. This would help to ensure that critical warning and preparedness information can be quickly disseminated within impacted regions.</p>



Strategic Findings & Recommendations

Finding No.	Description
#6 STRATEGIC OBSERVATION	The exercise demonstrated that the local <i>EOCs</i> were not equipped, staffed, or structurally designed to provide the level of sustained emergency management required in response to a catastrophic event.
#6 STRATEGIC RECOMMENDATION	The County EOC, as the central point of coordination within Lincoln County for emergency management, requires additional space (self-sufficient and seismically sustainable), ability to be functional in a mobile environment when needed (upgrade of current antiquated mobile unit), enhanced information and communications systems, additional trained personnel, and enhanced operational resources to meet the immediate and expanded requirements of a catastrophic event.



Strategic Findings & Recommendations

Finding No.	Description
#7 STRATEGIC OBSERVATION	The exercise showed that additional relationships need to be cultivated to effectively integrate more of the local community to manage and support both a large scale event and its subsequent impacts to the community.
#7 STRATEGIC RECOMMENDATION	It is essential the county and city governments commit to creating opportunities to effectively strengthen relationships; ideally traditional public safety partners (law enforcement, fire, emergency medical services) need to engage community volunteer organizations (food banks, faith based organizations, various providers of services to our access & functional needs populations), as well as the private sector (local businesses and service providers) to build trust and familiarity. Ultimately, the “whole community” approach will lead to additional disaster planning, education, and mitigation efforts countywide.



Tactical Improvement Plan (TIP)

- TIP items were derived from the pre-exercise work sessions, exercise hotwash sessions, exercise team observations, participant surveys, exercise coordination survey, and County AAR review meeting.
- TIP incorporated over 80 tactical items from the Cascadia lead-up activities and exercises(s).
- TIP is organized by sections to reduce duplication of efforts, maximize potential funding resources to meet objectives and to demonstrate completion of tasks.
 - Communications and Technology (C&T)
 - Facilities and Infrastructure (F&I)
 - Outreach (public, private, community)
 - Plans (EOP, forms, response annexes, NHMP, etc.)
 - Training



Tactical Improvement Plan (TIP)

- The TIP organizes the tasks into 3, 6, 12, 24, 36 month completion timeframes focused on short, intermediate, and long-term goals.
- Many of these will require financial resources to complete; which if not available, may delay accomplishment of goals.

Task #	SF&R #	Section	Task	Status Update	Assigned To	Priority	Status	Date: Due	Date: Done	% Done	Funding Allocation
78	1	COMMs & Tech	EOC: Damage Assessment - Install of Rover Software (FEMA) for pre survey and response survey of buildings	01/06/17, pending course on 01/11/17	County EM	Short Term		02/01/17		0%	
4	3	COMMs & Tech	EOC: Consideration to provide user friendly secure access to a shared location for response stakeholders to access for EOC activation information during events	01/06/17, currently Google Drive is utilized by County EOC but Federal and some State partners can not access these locations as they are considered unsecure by Federal IT standards	County EM	Intermediate	Not Started	06/30/17		0%	
5	3	COMMs & Tech	EOC: Continue to develop current tools adapted from other organizations or created internally to meet the resource tracking, sit stat needs of County EOC until fully functional software program can be purchased, obtained or provided via State (current State software program does not meet the needs of Lincoln Co EOC)	01/06/17, several areas for improvement were identified but this should be considered an ongoing improvement plan task	County EM	On-Going	In-Progress	06/30/17		25%	
6	3	COMMs & Tech	EOC: Develop user guides to utilize phones, network connection, and internet connection in the BOC for overflow or JIC	01/06/17, Not started yet	County EM	Intermediate	Not Started	06/30/17		0%	
10	3	COMMs & Tech	EOC: Finalize implementation of Internal EOC shared directory with set permissions, to include transfer of needed records for activation of response	01/06/17, - Submit list of authorized users to folder to IT Department - Set up activation folders - Transfer over appropriate files	County EM	Short Term	Not Started	03/31/17		0%	
16	3	COMMs & Tech	EOC: Provide for electronic management of pre identified and spontaneous volunteers across Lincoln County jurisdictions	01/06/17, Purchase of Volgistics for current volunteers completed, Jan-Feb process being established for use for spontaneous volunteers	County EM	Short Term	In-Progress	06/30/17		75%	
17	3	COMMs & Tech	EOC: Request additional EOC section email accounts; Plans, Sit-Stat Resources, Finance, Operations, PIO, Logistics	01/06/17, Submit work request to IT, set up accounts 01/10/17, IT indicated \$1,000 cost for additional email accounts - budgeted for FY17-18	County EM	Short Term	In-Progress	03/31/17		25%	\$ 1,000
18	3	COMMs & Tech	EOC: Transfer critical information to EOC external hard drive (large) and section external drives (small)	01/06/17, transfer information after completion of information to new EOC shared drive	County EM	Short Term	In-Progress	03/31/17		0%	
19	3	COMMs & Tech	EOC: Transfer over Email distribution lists to County EOC email account as well as export to back up Excel file	01/06/17, Schedule project	County EM	Short Term	Not Started	03/31/17		0%	
21	3	COMMs & Tech	Exercise: Once back-up communications are in place at each city, tribal, county EOC/ICP conduct communications exercise limiting amateur radio to minimal use, i.e., incorporate marine frequency, Citizens Band (CB), Family Radio Service (FRS), and line of site public safety radio operations	01/06/17, Conceptual exercise design to be initiated	County EM	Intermediate	Not Started	12/31/17		0%	
22	3	COMMs & Tech	Software: Secure or create user friendly and low cost EOC Incident Management Tool (in lieu of State Ops Center)	01/06/17, Pending State AAR for possible upgrade and/or other potential funding sources or opportunities	County EM	Short Term	In-Progress	12/31/17		25%	
79	4	COMMs & Tech	EOC: Email local Stakeholders regarding use of ROVER (FEMA); provide ODI Manual (from scheduled training)	01/06/17, pending course on 01/11/17	County EM	Short Term				0%	
80	4	COMMs & Tech	EOC: Forward reminder to local Stakeholders regarding use of RAPTOR and updates to program	01/06/17, pending course on 01/11/17	County EM	Short Term				0%	
1	5	COMMs & Tech	EOC: Additional "live" network ports needed for connection with internal laptops	01/06/17, IT work order submitted	County EM/IT	Short Term	In-Progress	03/31/17		25%	
			EOC: Call booster for Courthouse facility to enable internal and								



Lessons Learned Overview

- The responsiveness of government will be dependent upon its level of resiliency
- Detailed/tactical planning at all levels of government is imperative
- Planning assumptions must be vetted and shared among all stakeholders
- Fuel and energy supplies are critical to statewide operations and survivability.
 - Loss of fuel = ALL response & recovery operations STOP!!
- Plans must automatically trigger and be able to be executed in the absence of local and state leadership
- Existing statewide mutual aid is insufficient for a catastrophic response and substantiate external assistance would most likely be delayed
- Cascadia is a national issue and will require integrated planning with local, state, federal, & international partners



Lincoln County Top 4 Planning Efforts

- Development of ***Emergency Fuel Action Plan***
 - Assessment, conservation, salvage, resource ordering, prioritization, fuel points of distribution, transportation and distribution
- Development of ***Critical Facilities, Sites, Essential Services List***
 - Assessment and identification of resources, locations for points of distribution, critical services at specific fixed sites and flexible open spaces
- Consideration for contract for service for ***Catastrophic Management Services***
 - Pre contracted service for mass care and sheltering (tents, cots, showering/sanitation services, and mobile food units, communications)
- Increase in ***Cascadia Community Presentations***
 - Provide at least 1 public community presentation per month within the county to include unincorporated/rural/remote areas



Acknowledgements– Those who made it happen!!

County Departments:

- Facilities – set-up/demob and day of exercise support
- Information Technology – programming of EOC resources, set-up/demob and day of support
- LCSO Corrections Kitchen – support of all outreach/training events and day of exercise activities
- GIS – production of needed EOC maps
- Fleet Services – repairs to trailers, equipment and field operations set-up/demob
- LCSO Records – additional security badges for participants
- County PIO – support of all promotion events

Community Partners:

- Local print, radio media stakeholders promoted our outreach events and exercises
- DOGAMI provided additional support to develop our local scenarios
- OEM/FEMA for exercise structure

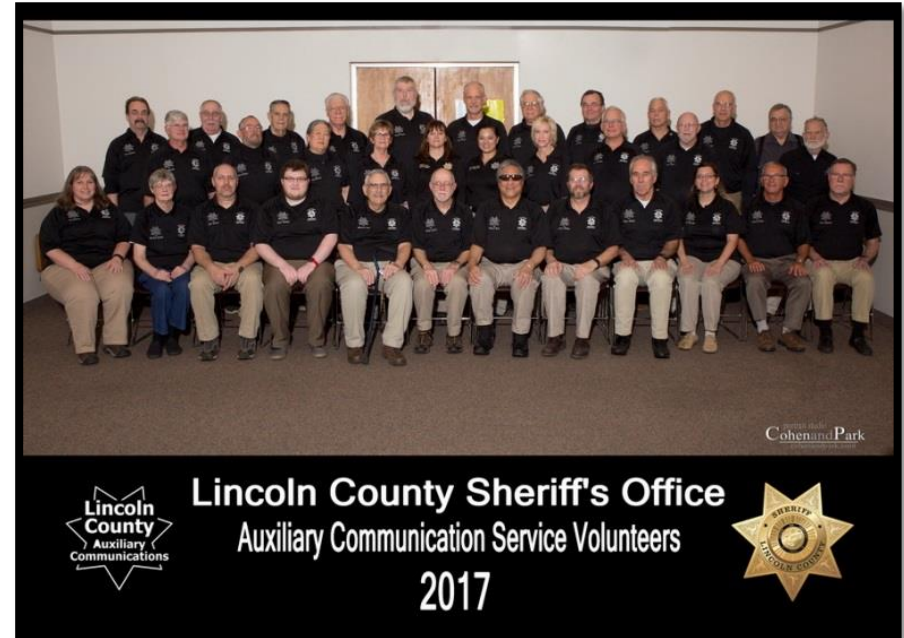
Volunteers:

- LCSO EM Department
- LCSO Auxiliary Communication Service
- LCSO SAR and Posse



Auxiliary Communication Services Volunteers

- June 7-10th exercises
 - 30 volunteers participated
 - Over 201 volunteered hours
- Lead-up exercises
 - 2 specific exercises
 - 278 hours volunteered
- July 2015 – June 2016
 - Over 1,000 hours volunteered towards Auxiliary Communication Service
 - 54 current volunteers





Questions?



Contact Information

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